

## 8. METAL CHIP HOPPER STORAGE AREA

The metal chip hopper storage area was a collection point for all oily machine cuttings and shavings in the Swissvale plant. As machine bins became full the cuttings were emptied into the chip hopper storage area. The oil and coolants would run out of the hopper down a declining 20 ft. concrete ramp and into a collection sump. When the chip hopper was full a vendor would remove it and reimburse the US&S for its metal scrap value. When the sump was filled the material would be removed as a hazardous waste. Typically US&S contracted with AMO Pollution Services, Inc., Canonsburg, PA to haul the oil to Tricil Environmental Services, Inc. in Hilliard, Ohio (Ref. Exhibits 8.1.1, 8.1.2, 8.1.3, and 8.1.4).

The last shipment of these oils left the Swissvale plant on July 16, 1987 and was sent to Tricil Environmental Services (Ref. Exhibits 8.1.3 & 8.1.4).

The roof and supporting structure was torn down and disposed of as scrap during the summer of 1987. In November 1987, the concrete ramp and sump were broken-up and staged on plastic for later disposal. Along with the concrete approximately six feet of soil was removed from under the ramp and sump and staged pending disposal.

On November 24, 1987 two soil samples were taken at the excavation and submitted to the I.T. Corporation laboratories in McMurray, PA for lead and TPH analysis (Ref. Exhibit 8.2.1, 8.2.2, & 8.2.3). Upon receiving the laboratory results the site was back filled with on site fill material and closed on Dec. 9, 1987.

The staged concrete and soil was taken to Cecos Niagara Falls, New York for disposal (Ref. Exhibit 8.3).



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES  
Division of Hazardous Waste Management  
P. O. Box 2063  
Harrisburg, PA 17120

Exhibit 8.1.1

ER-SWM-51:Rev.5/84

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
Generator's Name and Mailing Address <b>Union Switch and Signal</b> <b>Braddock Ave, Swissvale, PA 15218</b>		4. Generator's Phone ( <b>412</b> ) <b>273-4000</b>		A. State Manifest Document Number <b>PAB 01337416</b>		
5. Transporter 1 Company Name <b>AMO Pollution Services, Inc.</b>		6. US EPA ID Number <b>PA-D-038966230</b>		C. State Trans. ID <b>PA-AH 0156</b>		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone ( <b>412</b> ) <b>921-8486</b>		
9. Designated Facility Name and Site Address <b>Tricil Environmental Services, Inc.</b> <b>4350 Edgwyn Ave., Hilliard, OH 43026</b>		10. US EPA ID Number <b>OH-D-081290611</b>		E. State Trans. ID <b>PA-AH</b>		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity		14. Unit Wt/Vol
a. <b>Hazardous Waste Liquid, n.o.s.</b> <b>ORM-R NA 9189</b>		No. <b>001</b> Type <b>TT</b>		<b>5000</b>		<b>G</b>
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)		K. Handling Codes for Wastes Listed Above				
a. <b>Liquid T</b>		c.		a.		
b.		d.		b.		
15. Special Handling Instructions and Additional Information <b>9281</b>						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations, and all applicable State laws/regulations.						
Printed/Typed Name <b>m D Tourdot</b>		Signature <i>M.D. Tourdot</i>		Date <b>6-7-86</b>		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature <i>Ed Herceg</i>		Date <b>6-7-86</b>		
Printed/Typed Name <b>ED HERCEG</b>		Signature		Date		
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date		
Printed/Typed Name		Signature		Date		
19. Discrepancy Indication Space						
Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name <i>[Signature]</i>		Signature		Date		

PAB 01337416



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES  
Bureau of Waste Management  
P. O. Box 2063  
Harrisburg, PA 17120

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Exhibit 8.1.2

ER-SWM-51:REV. 10/84

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. P A D 0 0 0 0 0 1 1 1 5 1 2 2 4 6		2. Page 1 of 1		Information in the shaded areas is not required by Federal law but is required by State law.				
3. Generator's Name and Mailing Address Union Switch and Signal Braddock Ave., Swissvale, PA 15218 4. Generator's Phone ( 412 ) 273-4000				A. State Manifest Document Number <b>PAB 3319551</b>						
				B. State Gen. ID same						
5. Transporter 1 Company Name AMO Pollution Services, Inc.		6. US EPA ID Number P A D 0 3 8 9 6 6 2 3		C. State Trans. ID PA-AH 0156						
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone ( 412 ) 921-8486						
9. Designated Facility Name and Site Address Tricil Environmental Services, Inc. 4350 Edgwyn Ave., Hilliard, OH 43026 10. US EPA ID Number O H D 0 8 1 2 9 0 6 1				E. State Trans. ID PA-AH						
				F. Transporter's Phone ( )						
				G. State Facility's ID Not Required						
				H. Facility's Phone ( 614 ) 876-1168						
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
a. Hazardous Waste Liquid, n.o.s. ORM-E NA 9189			No. Type . . 1 TT		45.89		G		D 0.0.8	
b.										
c.										
d.										
J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)				K. Handling Codes for Wastes Listed Above						
Haz. Code Physical State		Haz. Code Physical State		a.		c.				
a. T I		c. I I								
b. I I		d. I I		b.		d.				
15. Special Handling Instructions and Additional Information										
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002 (b) of RCRA, I also certify that I have a program in place to reduce volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.										
Printed/Typed Name				Signature				Month Day Year		
17. Transporter Acknowledgement of Receipt of Materials				Signature				Month Day Year		
Printed/Typed Name				Signature				Month Day Year		
18. Transporter Acknowledgement of Receipt of Materials				Signature				Month Day Year		
Printed/Typed Name				Signature				Month Day Year		
19. Discrepancy Indication Space										
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.										
Printed/Typed Name				Signature				Month Day Year		
KEITH B. DAVIS 728200				Signature				12/30/86		

PAB 3319551



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES  
Bureau of Waste Management  
P. O. Box 2063  
Harrisburg, PA 17120

Exhibit 8.1.3

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)  
Form Approved. OMB No. 2000-0404. Expires 7-31-86

ER-SWM-51:REV. 10/84

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. P A D O O O O O 1 1 1 5		Manifest Document No. 0 7 1 6		2. Page 1 7 of 1		Information in the shaded areas is not required by Federal law but is required by State law.					
3. Generator's Name and Mailing Address Union Switch and Signal Braddock Ave., Swissvale, PA 15218						A. State Manifest Document Number PAB 3320122							
4. Generator's Phone (412) 273-4000						B. State Gen. ID same							
5. Transporter 1 Company Name AMO Pollution Services, Inc.						C. State Trans. ID PA-AH 0 1 5 6							
6. US EPA ID Number P A D O O 3 8 9 6 8 2 3 0						D. Transporter's Phone (412) 921-8400							
7. Transporter 2 Company Name						E. State Trans. ID PA-AH							
8. US EPA ID Number						F. Transporter's Phone ( )							
9. Designated Facility Name and Site Address Ticil Environmental Services, Inc. 4350 Edgwyn Ave. Hilliard, OH 43026						G. State Facility's ID Not Required							
10. US EPA ID Number O H D O 8 1 2 9 0 6 1 1						H. Facility's Phone (614) 876-1188							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
a. Hazardous Waste Liquid, n.o.s. ORM-E NA 9189						No. Type 1 TT		30.00		G		D O O 8	
b.													
c.													
d.													
J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code):						K. Handling Codes for Wastes Listed Above							
Haz. Code Physical State a. <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						a. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>							
b. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						b. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>							
c. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						c. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>							
d. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						d. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>							
15. Special Handling Instructions and Additional Information 74-1407						1976 JUL 1 1985 JUL 1							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002 (b) of RCRA, I also certify that I have a program in place to reduce volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.													
Printed/Typed Name John H Escher Jr						Signature John H Escher Jr		Month Day Year 17 1 1987					
17. Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name Arthur A. Miller		Signature Arthur A. Miller		Month Day Year 10 1 1987			
18. Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name		Signature		Month Day Year			
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.						Printed/Typed Name [Signature]		Signature [Signature]		Month Day Year 12 1 1987			



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES  
Bureau of Waste Management  
P. O. Box 2063  
Harrisburg, PA 17120

Exhibit 8.1.4

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Form Approved. OMB No. 2000-0404. Expires 7-31-86

ER-SWM-51:REV. 10/84

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded area is not required by Federal law but is required by State law.
3. Generator's Name and Mailing Address Union Switch and Signal Braddock Ave., Swissvale, PA 15218		P.A.D.O.00001115		A. State Manifest Document Number PAB 3320111	
4. Generator's Phone (412) 273-4000		6. US EPA ID Number P.A.D.O.38986230		B. State Gen. ID same	
5. Transporter 1 Company Name AMO Pollution Services, Inc.		8. US EPA ID Number .....		C. State Trans. ID PA-AH 0156	
7. Transporter 2 Company Name		10. US EPA ID Number .....		D. Transporter's Phone (412) 921-8486	
9. Designated Facility Name and Site Address Tricil Environmental Services, Inc. 4350 Edgwyn Ave. Hilliard, OH 43026		12. Containers No. Type		E. State Trans. ID PA-AH	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		13. Total Quantity		F. Transporter's Phone ( )	
a. Hazardous Waste Liquid, n.o.s. ORM-E NA 9189		3000		G. State Facility's ID Not Required	
b.				H. Facility's Phone (614) 876-1168	
c.					
d.					
J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)		K. Handling Codes for Wastes Listed Above			
a. Haz. Code Physical State		c. Haz. Code Physical State		a. b. c. d.	
b.		d.		1852 JUL 11	
15. Special Handling Instructions and Additional Information 74-1407				1685 JUL 1	
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002 (b) of RCRA, I also certify that I have a program in place to reduce volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.					
Printed/Typed Name John H Escher Jr		Signature John H Escher Jr		Month Day Year 171/487	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature Robert L Pape		Month Day Year 171/487	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name D. H. Harkins		Signature D. H. Harkins		Month Day Year 171/487	



INTERNATIONAL  
TECHNOLOGY  
CORPORATION

Exhibit 8.2.1

# Memorandum

To: V. Srivastava

Date: December 4, 1987

From: W. S. Davis *WSD 12-4-87*  
D. A. Wunderlich *DAW 12-4-87*

Subject: Analytical Results for Union Switch & Signal  
Project No. ~~305301~~ 305959

IT Analytical Services (ITAS) has completed the analysis of the six soil samples received in our laboratory on November 20, 1987. Results are presented in the enclosed tables and were determined in accordance with recommended analytical procedures listed in the Method Reference.

Should you have any questions or require additional information, please contact us at the Pittsburgh Laboratory.

ws

Exhibit 8.2.2

TABLE 1  
METALS ANALYSIS SUMMARY  
FOR UNION SWITCH AND SIGNAL  
PROJECT NO. 305199

PARAMETER	UNITS	SAMPLE IDENTIFICATION	
		Chip Hopper Pad: Sample #1	Chip Hopper Pad: Sample #2
Lead, Total	mg/kg <sup>(1)</sup>	51	140
Lead, E. P. Toxicity	mg/l <sup>(2)</sup>	0.21	0.39/0.39 <sup>(3)</sup>

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(1) mg/kg = milligrams per kilogram or parts per million.

(3) mg/l = milligrams per liter or parts per million.

(3) The sample was prepared and analyzed in duplicate.

Exhibit 8.2.3

TABLE 3  
SOIL ANALYSIS SUMMARY  
FOR UNION SWITCH & SIGNAL  
PROJECT NO. 305999

SAMPLE IDENTIFICATION	PARAMETER	
	CYANIDE, TOTAL mg/kg <sup>(1)</sup>	CYANIDE, LEACHABLE mg/l <sup>(2)</sup>
Heat Treat Area:		
Sample #1	6.4	0.45/0.27 <sup>(3)</sup>
Sample #2	22	0.24/0.23
Sample #3	<1.96/<1.84	0.02
Sample #4	<1.96	<0.02
Duplicate Extraction #1	--	0.27
Matrix Spike <sup>(4)</sup> Percent Recovery		
Heat Treat Area:		
Sample #3	--	88%
Sample #4	99%	--
TOTAL PETROLEUM HYDROCARBON		
Chip Hopper Pad:		
Sample #1	64	
Sample #2	460/500	
Matrix Spike Percent Recovery		
Chip Hopper Pad:		
Sample #2	111%	

(1) mg/kg = milligrams per kilogram or parts per million.

(2) mg/l = milligrams per liter or parts per million.

(3) The indicated samples were prepared and analyzed in duplicate.

(4) The sample was spiked during the preparation process.



Tanker Service  
Digester Cleaning  
Lagoon Cleaning  
Field Gymmy Service

77

Exhibit 8.3

Specialists in  
Disposition of  
Hazardous and  
Chemical Waste

Waste Specialist

661 Weber Drive Wadsworth, Ohio 44281  
216-334-8877

A Complete Transportation Company

1317-T-37		SITE #		CO.	TERM.	PRO. NO. 32379			
SHIPPER NAME UNION SWITCH AND SIGNAL				ORIGIN - ADDRESS CITY SWISSVALE, PA		DATE PICKED UP 12/9/87	DATE DEL'D. 12/9/87		
INVOICE TO:									
SPECIAL INSTRUCTIONS: W.O. 261635 Product Code 11551-AAH									
PLACARD: 1. 2.									
SAFETY EQUIPMENT 1. 2.									
HAZ. MAT.	COMMODITY DESCRIPTION (OR ACTIVITY PERFORMED):				QUANTITY	GALS. OR YDS. DRUMS	COMM. CODE	RATE	CHARGES
	Non-Hazardous, Non-Regulated construction debris and soil CECOS								
	W.O. Number 261635 Product Code 11551-AAH I hereby certify that the above material is not a hazardous waste as defined by 40CFR Part 261 or any applicable state law, has been properly described, classified and packaged and is in proper condition for transporting according to applicable regulations.								
HAZARDOUS WASTE MANIFEST NO. 1 STATE			HAZARDOUS WASTE MANIFEST NO. 2 STATE			HAZARDOUS WASTE FEDERAL MANIFEST NO.			
LOAD	OVER - HOUR UNLOAD (HRS. AM)				UNLOAD	OVER - HOUR UNLOAD (HRS. AM)			
ARRIVE GATE	9:00 AM					ARRIVE GATE	AM PM		
START QAD	AM PM					START UNLOAD	AM PM		
FINISH QAD	AM PM					FINISH UNLOAD	AM PM		
DEPART GATE	12:00 PM					DEPART GATE	AM PM		
TOTAL TIME	HRS.					TOTAL TIME	HRS.		
GROSS WEIGHT		TARE WEIGHT		NET WEIGHT		TERMINAL MANAGER APPROVAL		DATE	
VERIFIED BY: (CUSTOMER SIGNATURE)						RECEIVERS AGENT SIGNATURE AND/OR COMMENTS.			
DESTINATION NAME - ADDRESS CECOS						CITY Niagra Falls		STATE New York	
START TIME	STOP TIME	TOTAL TIME		BROKER NO. 109	TRAILER NO.	SPOTTED AT		DAYS _____ MILES _____	
FROM Wooster, Ohio, PA				TO Niagra Falls, NY				TO Wooster, OH	

CUSTOMER COPY